

**Fig. 1**



```

graph TD
    A((A)) --> 86[Automatically determine target point for next measurement]
    86 --> 88{Is target point error > pred. error limit ?}
    88 -- Yes --> 92{Does target point position violate pred. minimum spacing limit ?}
    88 -- No --> 90[Output estimated shape]
    92 -- Yes --> 90
    92 -- No --> 94[Obtain measured position and normal vector data for target point]
    94 --> B((B))
    B --> 86

```

**Fig. 3**